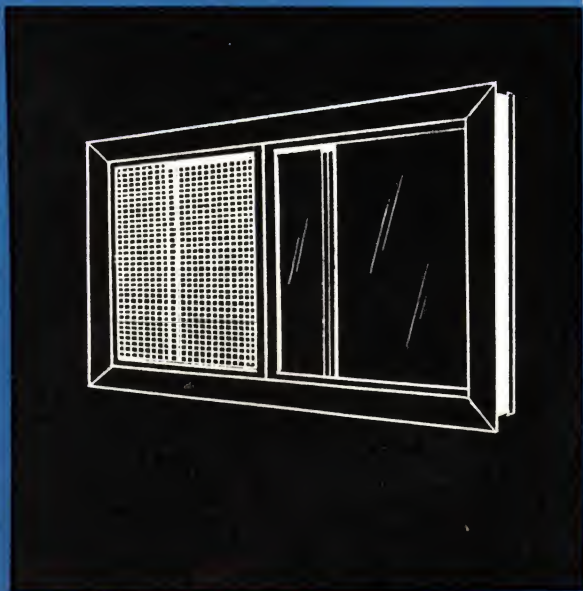
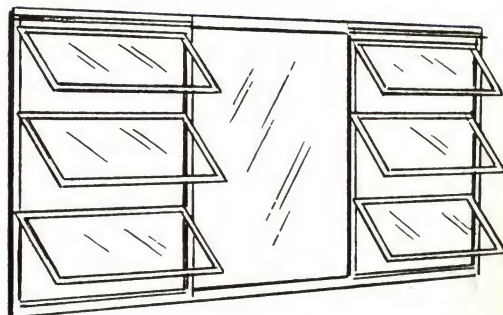


MITCHELL  
*National*

**ALUMINUM**  
**WINDOWS**

- awning windows
- picture windows
- horizontal  
gliding windows





# awning windows

## • general description

This is the first awning window especially designed to fit architects' demands for a scientifically correct version of the newest prime fenestration. Architects specify the NATIONAL awning window, confident that installation will be easy, operation smooth, and maintenance negligible. The window is delivered completely assembled, with integral operator unit, ready for installation.

## • features

Stainless steel center operator gears cannot be stripped. Completely factory assembled—no fitting on job. Permanently balanced. Weatherstripped, etched and lacquered at no extra cost. Center operator clears sills, drapes, etc. Unbroken horizontal lines when vents are open.

## • construction

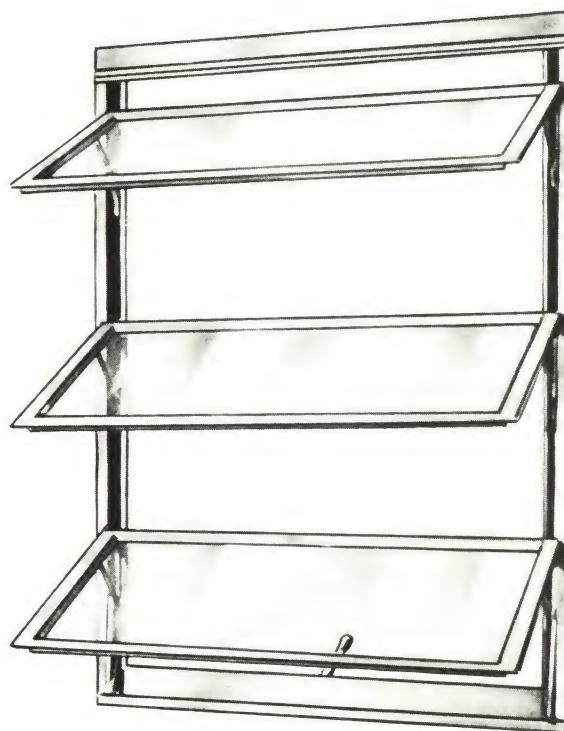
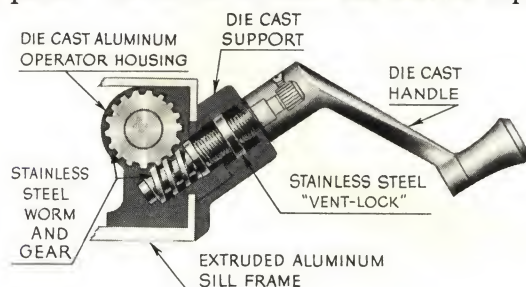
Frame, sash vents and linkage are made of 63ST-5 aluminum alloy—extruded, formed, machined, assembled and finished within our own plants—with new equipment designed for this purpose. Each separate part is specifically engineered to suit its use. Frame and vent sections are strengthened in critical areas; linkage is double-strength bar stock; bearings and gears are enlarged, die-cast and carefully machined to secure permanent adjustment and smooth operation.

## • center operator

Convenient window control at the center of the sill section assures perfect balance of the vents and eliminates frequent adjustments often necessary in side-operated units. Operating handle is close to the window sill member, and is inclined at 55 degrees to clear sill, screen or storm sash, and venetian blinds. No long projecting shaft requiring individual fitting on the job. The patented "Ventlock", integral with the operator mechanism, provides a positive stop for the gears at closed and maximum open positions, preventing stripped gears as well as strain on linkage and frame.

## • non-corrosive elements

Operator gears are stainless steel; link sections, gears and bearings are die-cast alloys; studs, rivets, screws, etc., are either aluminum or stainless steel. There can be no electrolytic or corrosive contact between adjoining parts. The entire window can also be supplied



with all exposed aluminum surfaces anodized, to offer a satin-smooth, lustrous surface which can be kept gleaming with minimum care.

## • permanent balance

Velvet smooth operation is assured by even distribution of forces applied when center operator is turned to open or close the window. Adjustments before or after installation are eliminated; the NATIONAL awning window is always automatically balanced.

## • easy installation

No delicate or prolonged adjustment, balancing or racking is required where NATIONAL awning windows are installed. The operator mechanism is an integral part, concealed within the sill section, and does not need to be attached to each window on the job. There are no "right hand" or "left hand" units to cause confusion and mistakes; any window of a given size can be inserted into an appropriate opening without question.

## • weatherstripping

National awning windows are fully weatherstripped with extruded plastic sections.

## • screens and storm sash

Screens and storm sash position on the interior side of National awning windows. Screening is 18-14 mesh aluminum; storm sash frames of 63ST-5 aluminum alloy. Aluminum screens and storm sash do not interfere with operation of awning; are easily removed from the inside of room for changing and cleaning.

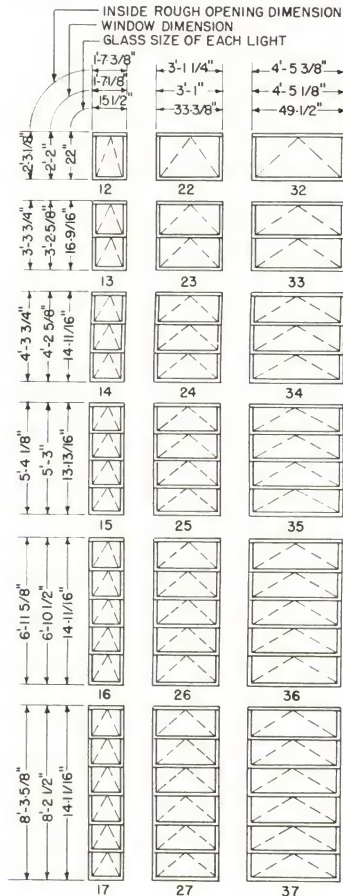


## • stock sizes

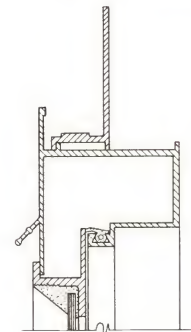
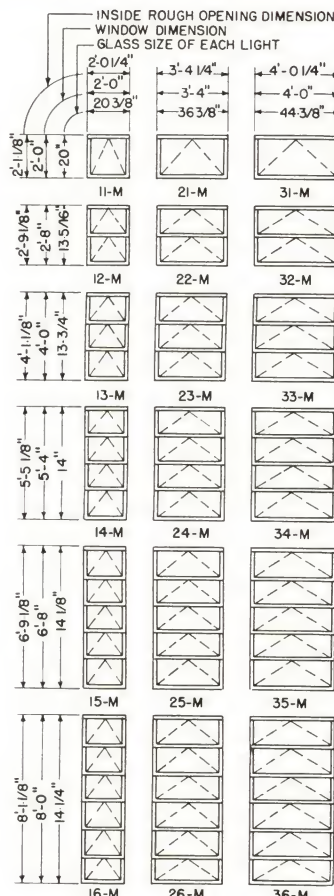
Standard sizes shown up to 4 vents high are available for immediate shipment, other sizes can be prepared on short notice.

## half full scale

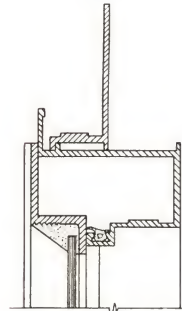
### standard sizes



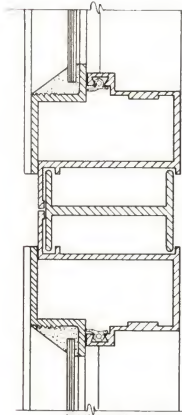
### modular sizes



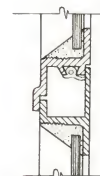
HEAD



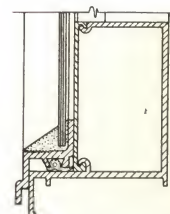
JAMB



MULLION



MEETING RAIL



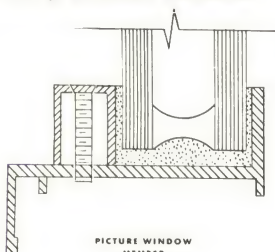
SILL

## • special sizes

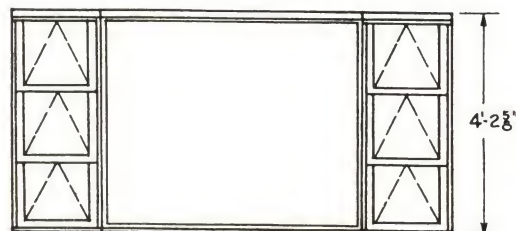
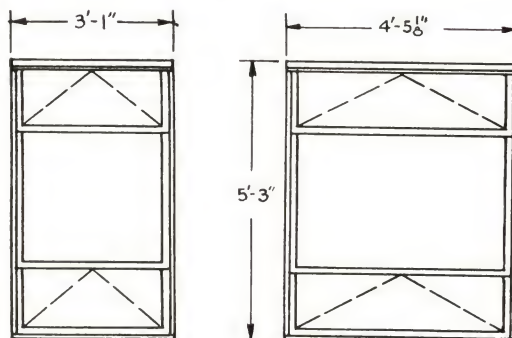
Special sizes within above described limits can be produced promptly on special order, if heights are held to standard or modular dimensions indicated.

## • picture windows

Picture windows to above indicated or special dimensions are shipped in easily assembled knock-down form. Combinations of picture and awning windows can be assembled on the job, using standard mullions.



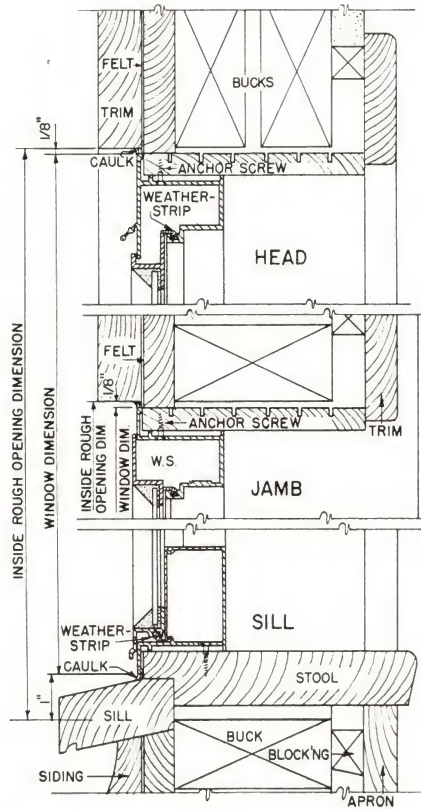
PICTURE WINDOW MEMBER



# awning windows - continued

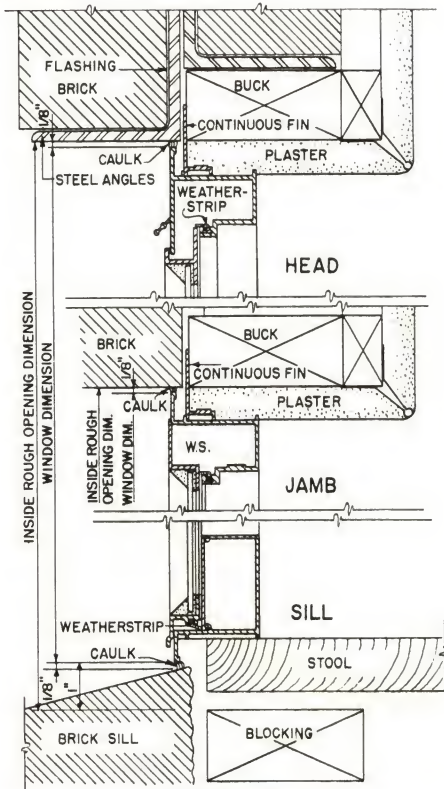
• installation details scale: 3" = 1'-0"

frame



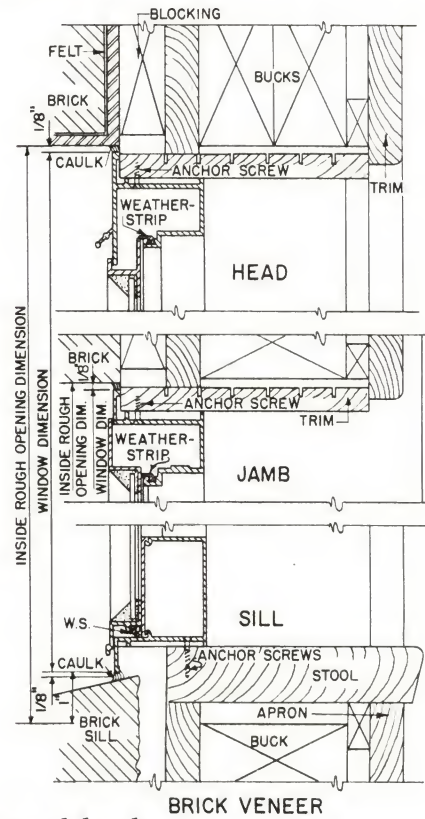
FRAME

solid brick



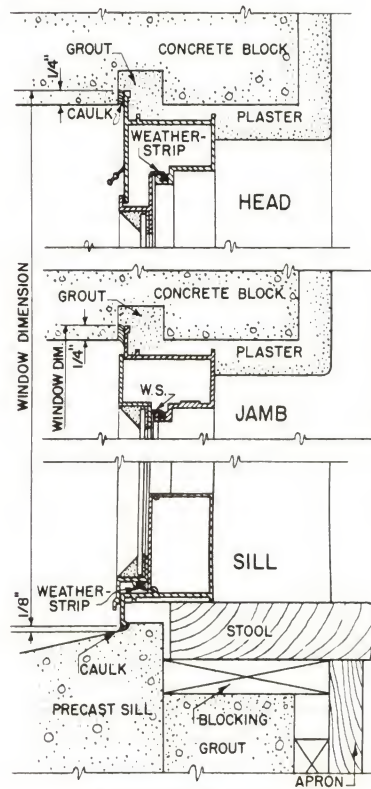
SOLID BRICK

brick veneer



BRICK VENEER

masonry block



MASONRY BLOCK



## • general description

National Horizontal Gliding Windows answer the demand for a unit which will combine utmost economy with easy installation, simple operations, and complete weather tightness, even in sub-zero or hurricane conditions.

## • features

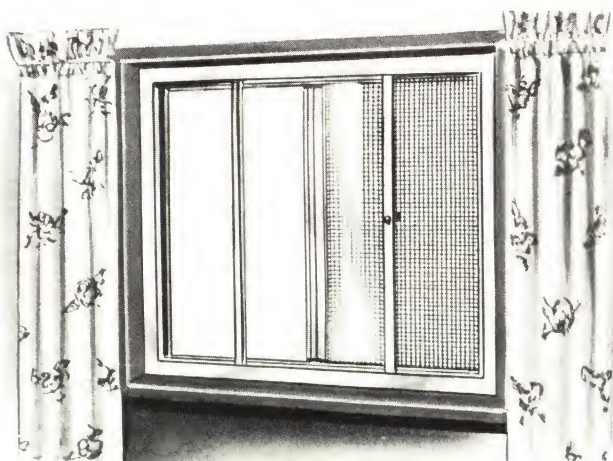
Lowest priced aluminum window... low installation cost... no adjustment required... shipped fully glazed and screened... exclusive double sill with drain slots... completely weatherstripped with closely packed wool pile... gliding sash operates smoothly and quietly... secure locking... exposed surfaces chemically cleaned, etched and lacquered at no extra cost.

## • construction

Frame and sash members are extruded 63ST-5 aluminum alloy, each part designed for strength, functional efficiency and beauty. Complete wool pile weatherstripping plus precision manufacturing assure a weathertight, leakproof window with horizontally gliding sash that moves easily within the sill channel.

## • screens and storm sash

National aluminum screens, made to the same critical specifications as National windows, are 18-14 mesh aluminum in extruded frames and match adjacent sash and frame members. Storm sash panels also have extruded frames. All screens and storm sash are inserted from inside the building and cannot be removed from the outside.



## • weatherstripping

Stainless steel binder strip containing high pile wool fabric provides flexible, water repellent, positive weatherstrip... that also provides insulating surface that will not wear or scratch contacting metal.

## • ventilation control

Same ventilation control as with double hung windows.

## • gliding sash

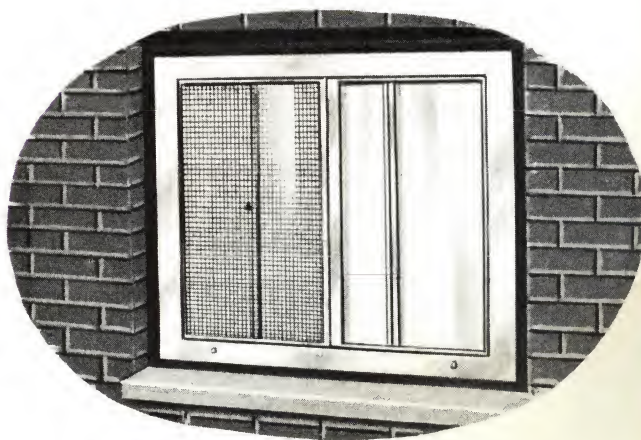
These sash permit horizontal movement from full-closed to full-open, without springs, weights or balances. National Gliding Windows securely lock in the closed position for protection against forced entry. Similar protection is afforded when the window is open, since the inside sash *must* be removed before the screen can be taken out. Both gliding and fixed sash are easily lifted out of the frame for cleaning inside the house.

## • easy installation

The recommended installation details on page 7 show how easy it is to use National Aluminum Gliding Windows with any type construction. They require no delicate adjustment or tedious balancing. They are ready to use when erected.

## • easy maintenance

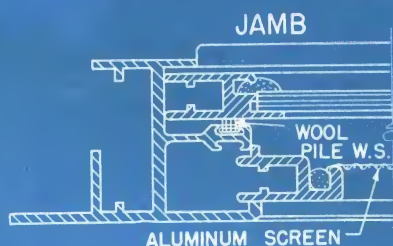
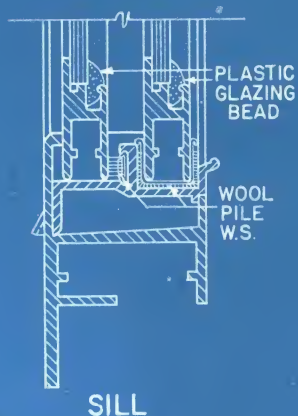
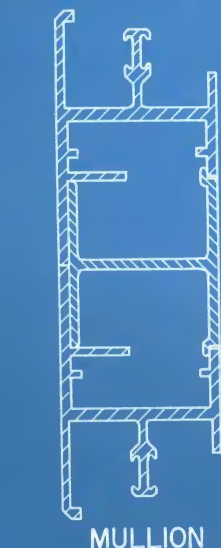
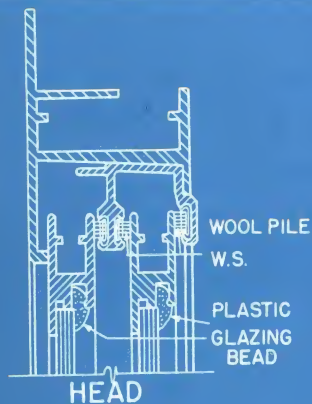
National Gliding Windows are rugged assemblies of a simplified design that eliminates tendencies to stick, corrode or bind. No weights to adjust; no cords or pulleys to replace or repair. Replacement of standard thickness glass is facilitated by plastic glazing beads.





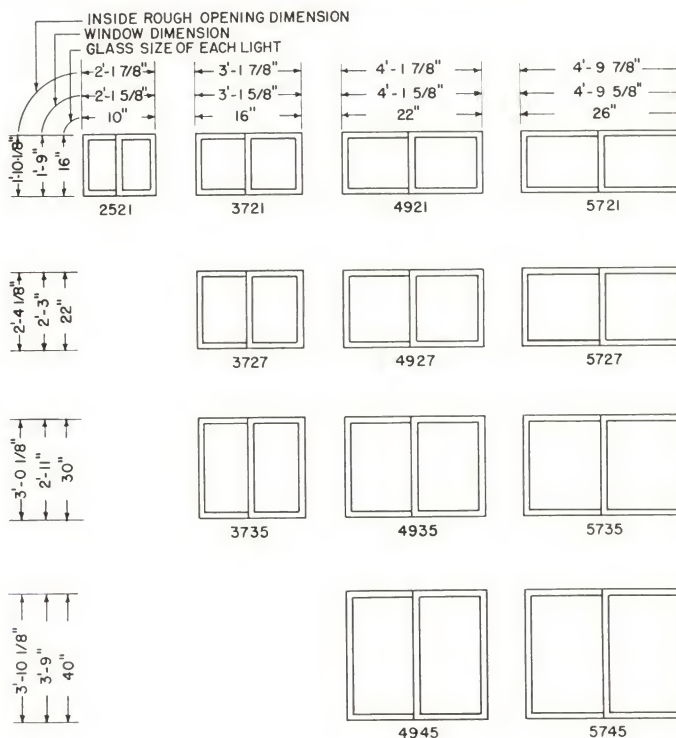
# horizontal gliding windows - continued

## half full size



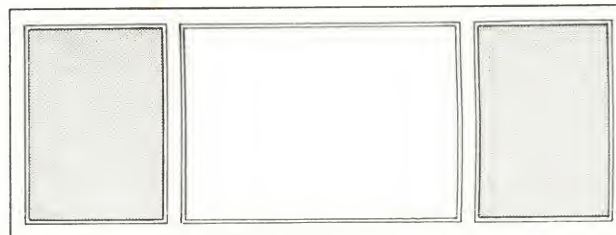
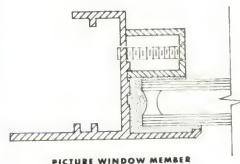
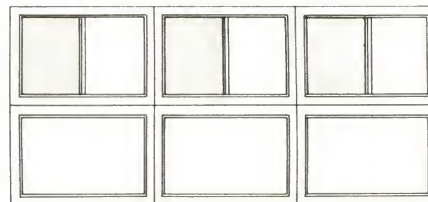
## • stock sizes

Standard sizes illustrated are available for immediate shipment; other sizes can be prepared on short notice.

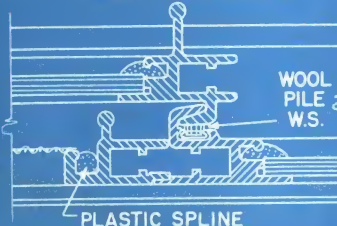


## • picture windows

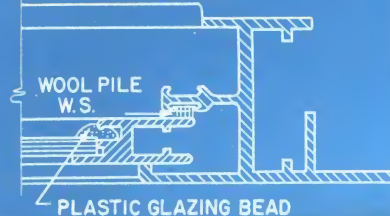
Picture windows are available in any of the above dimensions, or special sizes. They are shipped knocked-down, for easy assembly on the job. They may be combined with gliding windows of appropriate size into attractive mullioned assemblies, as illustrated.



## MEETING RAIL

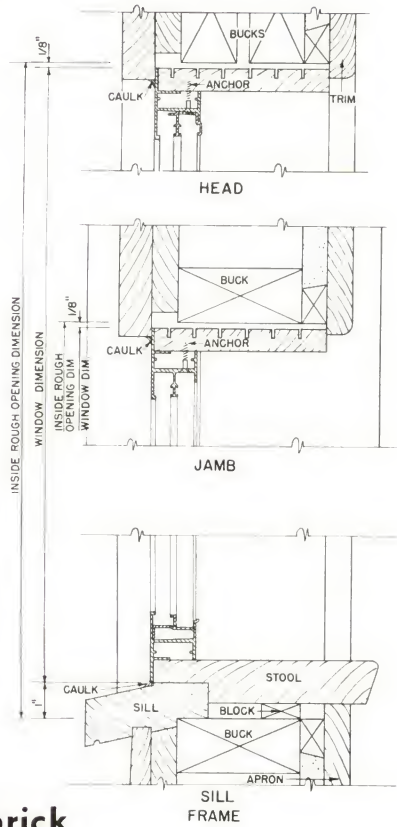


## JAMB

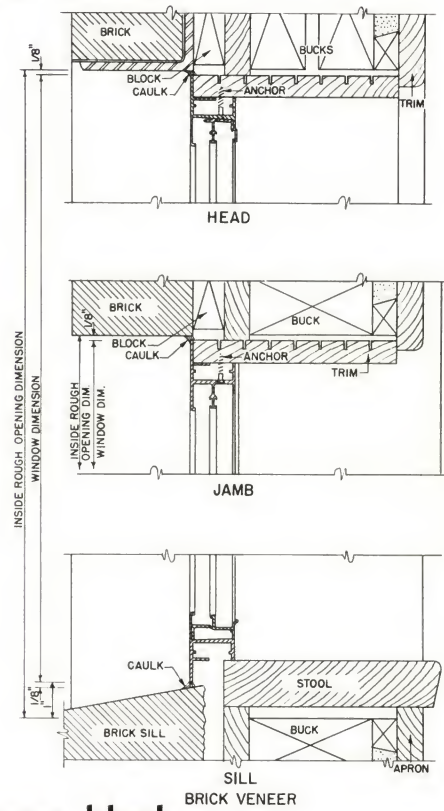


• installation details scale: 3" = 1'-0"

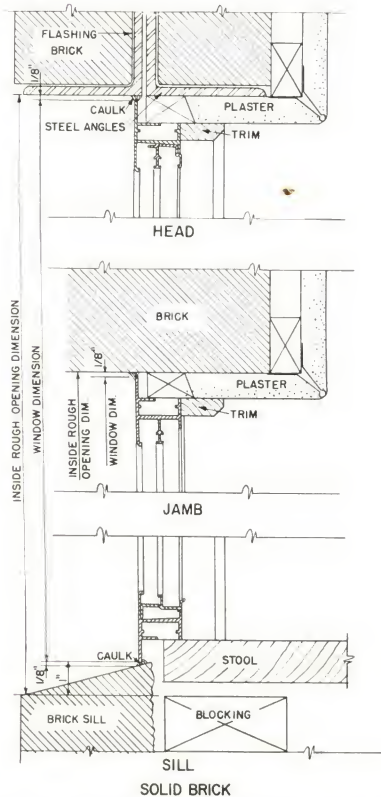
**frame**



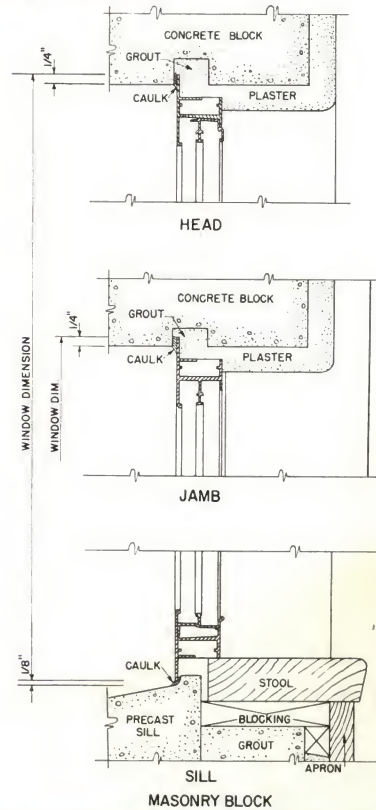
**brick veneer**



**solid brick**



**masonry block**





## • specifications for awning type windows

### general

Awning Windows shown on the drawings and called for in the window schedule shall be of the types and sizes indicated and shall be as manufactured by the National Window Corporation, Jackson, Mississippi.

### material

Frames, sash vents and linkage shall be of extruded aluminum alloy 63ST-5 ( ) finish. (Architect: please indicate etched and lacquered or anodized.) Operator worm and worm gear shall be stainless steel; linkage shall be double-strength bar stock; bearings and gears shall be die cast and precision machined; all studs, screws, rivets, etc., shall be aluminum or stainless steel.

### construction

All frame corners shall be notched and mechanically fastened. Sash shall be attached to aluminum linkage with aluminum or stainless steel fasteners.

### hardware

Sash operator shall be located at the center of the sill section with a 55 degree inclined handle shaft. This operator shall include the patented "Ventlock" which provides a positive lock for the gears at the maximum closed or open position. This shall prevent gear stripping and obviate strain on linkage or frame.

### installation

Windows shall not be installed until all openings have been

properly prepared and all adjacent work by other trades has been carried as far as possible. Windows shall be set plumb, level and true and shall have a complete seal of caulking compound compatible with aluminum on all sides of the frame.

### glazing

Window units shall be glazed, and all glass shall be securely set in a plastic glazing compound with glazing beads or putty compatible with aluminum.

### screens

Screen frames shall be aluminum alloy 13/16 inches by 3/8 inches in cross section. Corners shall be mitered and joined by concealed aluminum corner angles. Screen cloth shall be 18-14 mesh aluminum and shall be securely anchored in the frames by means of plastic or aluminum splines.

### storm sash

Flat storm sash panels shall be easily applied to and removed from the inside of the window unit. Glass shall be BSS grade for smaller units and BDS grade for larger units, embedded in a glazing compound and held in place by a plastic glazing bead. The frame members shall be 1-1/8 inches by 3/8 inches in cross section and shall be extruded from 63ST-5 aluminum alloy.

### weatherstripping

All sash shall be completely weatherstripped on all contact edges with extruded plastic material.

## • specifications for horizontal gliding sash

### general

Horizontal gliding sash shown on the drawings and called for in the window schedule shall be of the types and sizes indicated and shall be as manufactured by the National Window Corporation, Jackson, Mississippi.

### materials

Frame and sash members shall be of solid extruded aluminum alloy 63ST-5 ( ) (architect: please indicate etched and lacquered or anodized finish.) All screws, rivets and studs shall be aluminum or stainless steel.

### construction

All frame corners shall be mitered, keyed and mechanically fastened. Sash shall slide in a separate sill channel which will be held to the sub sill by the position of the jamb sections. This track shall be provided with weep holes to carry off condensation and track drainage. The sill section shall also contain weep holes to allow the run-off to pass over the exterior stone, wood, etc., sill.

Meeting rails shall have interlocking legs with weatherstripping. The inside sash shall be provided with a spring latch assembly at the jamb for positive locking.

### installation

Windows shall not be installed until all openings have been properly prepared and all adjacent work by other trades has been carried as far as possible. Windows shall be set plumb, level and true, and shall have a complete seal of caulking compound compatible with aluminum on all sides of the frame.

### glazing

Window units shall be glazed and all glass shall be securely set in a glazing compound and held in place with a plastic glazing bead.

### screens

Single-piece screen units shall be provided for all opening. Screen cloth shall be 18-14 mesh aluminum and shall be securely anchored in the frames by means of vinyl splines.

### storm sash

Single piece storm sash panels shall be easily applied to and removed from the inside of the window unit.

### weatherstripping

All sash shall be completely weatherproofed with wool pile fabric strip.

## • National Window Corporation

### materials

All National aluminum windows are manufactured in our fully integrated, modern plant in Jackson, Mississippi, with equipment especially designed for the economical, close tolerance manufacture of each particular type. Frames, sash, vents and linkage are made of 63ST-5 aluminum alloy, extruded on our own presses and heat treated to maximum hardness in our own aging ovens. Die castings are of fully compatible alloys. All screws are either aluminum or stainless steel.

### architectural assistance

National Window Corporation will render partial or complete assistance to architects, contractors or builders who desire specifications or shop drawings, or advice on installation cost-savers. All requests will be promptly answered in detail.



MILNER BUILDING, JACKSON, MISSISSIPPI  
A recent installation of National Awning Windows

# National Window Corp.

P. O. Box 632

Jackson, Mississippi